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2000

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20 Victoria Street
Toronto, Ontario M5C 2N8
Tel.: (416) 362-5211
Toll Free: 1-800-387-2689
Fax: (416) 362-6161
Email: info@micromedia.on.ca

Ontario Goat Research and Services Committee

OASCC Index |

Contents

- Committee Activities
- State of the Industry
- Dairy Sector
- Meat Sector
- Fibre Sector
- Emerging Issues
- Action Taken on Last Year's Research & Development Recommendations
- Response to Last Year's Non Research & Development Recommendations
- 1998 Recommendations
- Detailed Recommendations - Service
- Duties and Terms of Reference of the Committee
- Committee Membership

Table of Contents
Aquaculture
Beef
Broiler
Dairy
Deer
Egg Layer
Equine
Fur-Bearing
Pork
Sheep
Turkey

EXECUTIVE SUMMARY

COMMITTEE ACTIVITIES

The Committee met on May 26,1998 to discuss the state of the industry, emerging concerns and develop this report. Committee membership has not changed since 1997.

STATE OF THE INDUSTRY

In 1991 there were 2,400 registered producers keeping 33,405 goats of all classes. In 1996 this had increased to 2,521 producers

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keeping 45,258 goats. In this period the number of producers had increased by 5% but they were keeping 32% more animals. All areas except Northern Ontario reported an increase in producers and the average number of animals in the herd. Even though 1997 statistics were not available when this report was completed, the industry continues to expand with both producers moving to goats, especially dairy from other livestock operations.

The introduction of the Boer goat to the meat sector has increased the awareness of genetic evaluation as a tool to improved production, both in milk and meat production. The dairy sector has increased the use of the Boer goat as a terminal sire to produce a better quality kid for the meat market.

A first draft of a Code of Practice for Goats has been written. In the next year it is expected that it will pass the committee stage and be published for producers.

| Table of Contents | | Top of Page |

DAIRY SECTOR

The goat milk industry is continuing to build strength. The total number of licensed "Grade A" producers has increased from 91 to 95, with production and herd sizes increasing.

Interest remains strong from newcomers wanting to set up goat dairies.

Unconfirmed estimates suggest that over 5 million litres of fluid goat milk are being produced annually in the province. This is an increase on the last statistics collected by the Audit Branch, OMAFRA. Even with this increase in production, supply cannot fulfill the demand.

Milk prices on the farm have generally stayed the same. Hewitt's Dairies of Hagersville remain the largest buyer of raw milk in Ontario, collecting from approximately 70 producers. Four processors in Eastern Ontario are buying milk from about 20 producers.

With the privatization of DHI, producers are expressing concern that they are losing access to fluid milk quality information, essential to the improvement of the milking herds.

Somewhat less than half of the goat milk currently produced commercially is sold as fluid milk. Currently, there are two processors who package fluid goat milk for sale. While many consumers drink milk for health reasons, such as food sensitivities in themselves and their children, others are attracted by goat milks natural image. It is important than this image not be compromised. Goat milk yogurt and ice cream are also produced commercially. The dynamic and growing goat cheese market uses more than half of Ontario's annual milk production. As consumers here and in the U.S. seek more variety in their foods, goat cheese is more commonly seen in restaurants, in magazine recipe articles, and on supermarket shelves. One Ontario company specializing exclusively in goat cheese provides. At present it uses over 65,000 litres of goat milk a week, but requires 100,000 litres per week for present demand, and in excess of 200,000 litres per week for the planned production expansion. Other cheese plants in Eastern and Southern Ontario continue to produce of goat cheese products.

Producers still have difficulty in finding reliable technical information, formulating rations to get the best production from their goats, and developing a practical, cost effective system for raising the excess kids produced by dairy goats.

| Table of Contents | | Top of Page |

MEAT SECTOR

During 1998 the market prices for meat animals has been depressed, resulting in more off-farm sales. Many of these animals do not pass through the meat inspection system. The use of the Boer buck as a terminal meat sire for dairy breeds has produced a very marketable meat kid. There is a strong market demand for these type of meat animal, fetching up to $2.25 per pound live weight.

As there are still poorly finished kids coming onto the market to receive the "Canadian Chevon" stamp, there is a concern that this designation does not indicate quality.

The OGBA is still working towards a check-off on each animal sold for slaughter to finance its operations. At the moment the OGBA is a purely volunteer organization. Funds from the check-off will enable it to have permanent staff to support and develop the goat industry in the model of the Ontario Sheep Marketing Agency.

| Table of Contents | | Top of Page |

FIBRE SECTOR

Producers are not shipping fibre to the Woolgrowers at Carlton Place, as it is being stockpiled because of low prices. They prefer to sell direct to weavers by private contact for a negotiated price, or have it processed and return to them for cottage industry production. Typical prices for mohair are:
Farm gate fleeces kid $10 - $15 per pound
adult $4 - $8 per pound dependent on quality

Processed ready to use $5 per 100 gm.

Mohair sweaters $75 to $450 at craft sales depending on pattern, hand or machine knitted etc.

| Table of Contents | | Top of Page |

EMERGING ISSUES

1. ON-FARM MILK QUALITY INSPECTION

There is a lack of inspection of goat dairies since the privatization of the dairy inspection to the Dairy farmers of Ontario. By law, OMAFRA is required to ensure that this inspection services is in place. There is a potential problem with residues as almost all antibiotics used in the goat industry are "off label" with an extended withdrawal period.

2. MEAT INSPECTION

The farm gate sale of live kids increased in 1997. Some of these animals will pass through a provincial abattoir with inspection, but an increasing number will not. This is not illegal if the carcass is for the personal consumption of the purchaser, but uninspected chevon could enter the food chain by this route.

3. LIVESTOCK ADVISORS

In the latest reorganization of OMAFRA, the sheep and goat industry have lost 1 FTE advisor. This is a serious loss at a time when both groups are experiencing expansion in milk and meat production.

4. NUTRIENT MANAGEMENT PLANS

Some municipal authorities are using the guideline animal group equivalent from the Nutrient Management Plan guidelines as "gospel" for the carrying capacity of a particular farm, instead of using these as the intended guide to the large operation. There appear to be discrepancies in these figures in the amount of manure or byproduct produced by the various species. This application is becoming a serious hindrance to the development of the goat and other species in this province. By their application, municipalities are labeling all operations as "super" farm factories and treating them as so.

5. PREDATION

Predators continue to be a problem to producers. OMAFRA's initiatives in the development of an integrated predator control program for the province will assist producers to reduce predation, but they must be pursued to ensure that there will be aid to producer in the control of the problem animals. The integrated predator control program must be considered complementary to the compensation program, not its replacement. There will always be a need for some compensation, as the predator problem can never be eliminated.

| Table of Contents | | Top of Page |

ACTION TAKEN ON LAST YEAR'S R & D

RECOMMENDATIONS

1. Caseous Lymphadenitis. The work on the serological testing has continued. Progress has been slowed due to the difficulty in identifying negative herds. To date, two flocks have been found in Ontario and supplies of negative sera obtained from Colorado and California.
2. Chlamydia Test. The testing of herds for this disease has continued. A drug company is exploring the import of the new, improved chlamydia vaccine from the United Kingdom.

| Table of Contents | | Top of Page |

RESPONSE TO LAST YEAR'S NON R & D RECOMMENDATIONS

1. RECOMMENDATION: # 1: **EXTENSION SUPPORT**

TO: OMAFRA

To maintain the extension support at least at the present level for the industry. As new producers join the industry, it is essential that they receive support from OMAFRA staff in all areas to develop a viable operation.

RESPONSE:

OMAFRA

OMAFRA provides extension support to the goat industry through field offices, livestock advisors and sheep and goat specialists. A dairy goat information workshop organized in cooperation with the industry attracted 90+ attendees. Evaluation results indicated an increase in knowledge in the area of nutrition and animal management.

| Table of Contents | | Top of Page |

RECOMMENDATION: # 2: **AVAILABILITY OF DRUGS**

TO: HEALTH CANADA, CANADIAN ANIMAL HEALTH INSTITUTE

As with other minor species, the non-availability of drugs with specific claims for goats is a major problem. Either drugs are used "off-label" on veterinary advice with the prolonged withdrawal times; or they are misused with implications to product quality assurance. The committee strongly recommends that the data

from other countries be accepted to allow the manufacturers to make drugs available to the industry without the long and expensive Canadian testing.

RESPONSE:

HEALTH CANADA

The following reply was received by OMAFRA from the Director, Bureau of Veterinary Drugs, Health Canada:

"The Bureau of Veterinary Drugs does accept data generated from other countries in support of the registration of drugs for use in animals. In some circumstances, however, we require Canadian data to confirm that the drug effect (s) observed can be reproduced under Canadian conditions of use, including climate, diet, genotype, husbandry practices, etc.

The Veterinary Drug Evaluation Fees Regulations do provide for a substantial (90%) reduction in evaluation fees, upon request from a drug manufacturer, when the total anticipated 3 year gross sales forecast is less than 10% of the prescribed drug evaluation fee.

These provisions are currently in place and may be used by drug manufacturers when applying to register veterinary drugs for use in goats or sheep."

A contact provided in the reply is Dr. Donald A. Landry, Chief, Pharmaceutical Assessment Division at (613)957-3876.

CANADIAN ANIMAL HEALTH INSTITUTE

The regulatory process and data requirements for approval of a new drug for a minor use or in a minor species has been a topic of discussion between the CAHI and the Bureau of Veterinary Drugs (BVD) for some time. There are in fact provisions at the BVD for a drug approval for a Minor Use/Species. These provisions allow for a company to use applicable foreign data and an approval in another recognised jurisdiction as the basis of a Supplemental New Drug Submission to extend a claim for a drug that is already approved in Canada. There are examples of this in some recent new drugs approved for sheep. And, I am aware of some additional ones that are pending.

For drugs that are not already approved in Canada for a major species, the development cost to generate the needed data for the Canadian market would likely not allow those products to move forward for a minor use/species. Companies evaluate each new product on a case by case basis from a business perspective in an effort to ensure a return on investment. Cost Recovery (CR) has added another factor in a company's assessment of proceeding with a Minor Use/Species application for a product. Ottawa has made a commitment to reduce the CR fee where anticipated sales are predicted to be small.

The bottom line is we need to ensure both the safety of the food derived from those animals and the safety of the animals these drugs may be used in. In many cases, the data available in these Minor Use/Species is very limited or non-existent. Without data, the BVD is not in a position to provide "guidance" on dosage, indication, route of administration etc. We are fortunate that veterinarians in Canada can prescribe "extra-label" to provide for the care of animals.

This being said, a model has been set in Canada for the registration of products, particularly off patent products, for minor use/species. The Salmon Health Consortium was established originally by East and West coast salmon producers. It has

focused its efforts on the availability of therapeutants for that sector. By working with the Canadian manufacturers and by gathering data from foreign jurisdictions they have been successful in registering some off patent products, which industry has limited investment interest in from a research and development standpoint.

In summary, the BVD has had provisions for Minor Use/Species applications for new drugs for many years. These provisions require a limited amount of applicable scientifically sound data from a recognised jurisdiction. This has recently resulted in some new drug claims for products used in sheep. The BVD can neither approve nor give "guidance" without the applicable data to ensure the safety of the food products derived from these animals.

| Table of Contents | | Top of Page |

RECOMMENDATION: # 3: INDUSTRY STATISTICS

TO: OMAFRA

As the industry expands, bench mark information is needed for producers to plan their development and have current information for financial institutions etc.. The committee recommends that OMAFRA collect and publish information.

RESPONSE:

OMAFRA

OMAFRA is reviewing methods and opportunities to collect production and financial data in the goat industry.

Alternative data collection methods through agri-business and leaders is under investigation since goat producers do not participate directly in OMAFRA's business and production information programs.

| Table of Contents | | Top of Page |

RECOMMENDATION: # 4: PREDATION

TO: OMAFRA

As an integrated predator management program is developed for the province, the committee requests that goats are included along with sheep and cattle in assistance to producers to overcome this serious problem. The committee also recommends that once the program is in place, OMAFRA staff continue to keep abreast of the latest developments in control techniques.

RESPONSE:

OMAFRA

Information and assistance is available to goat producers experiencing losses of animals to predators. OMAFRA funded projects such as the predator information officer and problem

predator trapping programs have been effective in reducing the number of attacks on domestic livestock through selective removal of predators.

| Table of Contents | | Top of Page |

RECOMMENDATION: # 5: **GENETIC EVALUATION**

TO: OMAFRA

Even though previous surveys have suggested no interest in this service, the industry has changed since then. The Committee recommends the amending of the SFIP evaluation program to serve the industry.

RESPONSE:

OMAFRA

Further surveys of available programs and computer software and of goat producer needs in terms of performance and genetic evaluations are required and a need demonstrated before OMAFRA will consider supporting the development of such programs.

| Table of Contents | | Top of Page |

1998 RECOMMENDATIONS

DISTRIBUTION OF RECOMMENDATIONS

RECOMMENDATION	ARIO	AAFC	OMAFRA	U OF G
Health	X			X
Genetics		X	X	
Nutrition				X
Product Development				X
Reproduction	X			X
Management		X		

| Table of Contents | | Top of Page |

RECOMMENDATION # 1: **HEALTH**

TO: ARIO, UNIVERSITY OF GUELPH **PRIORITY: 1-B**

DETAILED OBJECTIVES:

1. Identify the major production limiting diseases, and develop methods of control and eradication.
2. Investigate the causes, control and prevention of neonatal diseases in kids.
3. Evaluate the results of research into common pathogens elsewhere in the world, and if applicable, apply the findings to the control of these diseases in the province.
4. Investigate the prevalence and significance in public health of zoonotic diseases.
5. Develop computer systems to assist herd health management and production.

BACKGROUND:

As the goat industry develops, health management will move from the identification of the simple, single pathogen disease to the recognition of the multifactorial diseases involving one or more pathogens, the environment, nutrition and possibly genetics. To solve these problems a multidisciplinary approach, using many techniques will be needed.

| Table of Contents | | Top of Page |

RECOMMENDATION # 2: **GENETIC IMPROVEMENT**

TO: AAFC, OMAFRA **PRIORITY: 1-A**

DETAILED OBJECTIVES:

1. To develop genetic improvement programs to measure in herd and across breed improvements.
2. To compare the performance and productivity of the present breeds in Ontario.
3. To develop Expected Progeny Differences (EPD's) economic traits.
4. To determine the heritability of important fibre traits.

BACKGROUND:

The introduction of the Boer goat has stimulated interest in the production potential of these and the native breeds under Ontario conditions. In the past there has been very little work in this area. As a start, the computer infrastructure of the Sheep Flock Improvement Program can easily be adapted by adding goat breeds to the current sheep program, so that data can be collected to develop goat adjustment factors.

| Table of Contents | | Top of Page |

RECOMMENDATION # 3: **NUTRITIONAL STANDARDS FOR ONTARIO GOATS**

TO: UNIVERSITY OF GUELPH (PROF. GANT) **PRIORITY: 1-A**

DETAILED OBJECTIVES:

1. To develop a nutrition computer model for the growing kid and the breeding doe raised under Ontario conditions.

BACKGROUND:

Much of the data used to formulate goat rations have been derived from work in climates, environments and production systems far removed from Ontario. The development of this model would give producer information to improve feeding appropriate to this province. The end result being improved production and carcass quality.

| Table of Contents | | Top of Page |

RECOMMENDATION # 4: **PRODUCT DEVELOPMENT & 4B-PRODUCT QUALITY**

TO: UNIVERSITY OF GUELPH, FOOD TECHNOLOGY **PRIORITY: 1-A**

DETAILED OBJECTIVES:

1. To investigate genetic and management factors that can affect the consumer quality of milk and meat.
2. To evaluate the genetic components of economically important carcass traits and their value to the producer.

BACKGROUND:

The keeping qualities of goat milk appears to be related to the cell count. The standards for cell counts in cow's milk cannot be used for goat milk so standards need to be established.

| Table of Contents | | Top of Page |

RECOMMENDATION # 5: **REPRODUCTION**

TO: AAFC, ARIO, UNIVERSITY OF GUELPH **PRIORITY: 1-A**

DETAILED OBJECTIVES:

1. Apply new reproductive technologies to goat breeding, including embryo transfer technologies, improved semen handling and storage, and the hormonal manipulation of the oestrus cycle.
2. Investigate the causes of reduced reproduction performance at both the individual and herd level, the control of abortion and other failures.

BACKGROUND:

The causes of poor reproduction in the goat herd often go unrecognized and unresolved, but can markedly reducing productivity. The effective application of modern reproductive techniques can only succeed if there is initially a good reproductive performance in the herd. By the use of modern reproductive technology the herd can be managed more efficiently labourwise, allowing more goats to be handled by the same labour force.

| Table of Contents | | Top of Page |

RECOMMENDATION # 6: **MANAGEMENT**

TO: AAFC, OMAFRA, UNIVERSITY OF GUELPH **PRIORITY: 1-A**

DETAILED OBJECTIVES:

1. To investigate management systems that will provide optimum production for the different segments of the Ontario herd.
2. Evaluate the output and economics of different production systems (e.g. intensive housing v. pasture grazing, accelerated v. once a year kidding etc.)
3. Evaluate different housing and management systems through all seasons for the raising of kids.

BACKGROUND:

Because of Ontario's wide climatic variations, established management systems need to be modified to provide the optimum for productions. The systems are there, all that is needed is to adapt them to suit this province. The correct management for a particular operation will not only increase production, but also enhance animal welfare.

| Table of Contents | | Top of Page |

DETAILED RECOMMENDATIONS - SERVICE

RECOMMENDATION # 1 **EXTENSION SUPPORT**

TO: OMAFRA

Promotion of Best Management Practices for Goat Production, both for existing and new producers.

RECOMMENDATION # 2 **MILK QUALITY**

TO: OMAFRA

A "feedback" mechanism is required for milk quality to help producers. Support is needed for any private initiatives to identify product quality for the producer.

RECOMMENDATION # 3 **FORWARD CONTRACTING**

TO: OMAFRA

To support any move towards forward contracting of meat goats. The forward contracting of lambs has already produced feedback on quality to the producers; a similar scheme for meat goats would have the same effect

RECOMMENDATION # 4 **FIBRE QUALITY**

TO: OMAFRA

To help the fibre segment of the industry, support is required for the establishment of standards for fibre. These already exist in other countries and could easily be used in Ontario. Classifying fibre to standards would encourage producers to produce an improved product and increase the value of fibre.

| Table of Contents | | Top of Page |

DUTIES AND TERMS OF REFERENCE OF THE COMMITTEE

1. To review goat research and services being carried out in Ontario.
2. To identify problems facing the goat industry requiring investigation.
3. To assess relevance of research and service programs and suggest priorities for new research.
4. To recommend the expansion or termination of programs already under way.
5. To assess programs on a cost benefit basis.
6. To liaise with researchers on the progress of research and services

| Table of Contents | | Top of Page |

COMMITTEE MEMBERSHIP

Name	Location	Affiliation	Term to
Dr. John Martin	Wellington Place, R.R. #1, Fergus, Ontario N1M 2W3 Tel.: 519-846-0965 Fax: 519-846 -8101 E-Mail: jmartin@omafra.gov.ont.ca	Veterinary Extension	1998
Anita O'Brien	Ontario Government Building, Beechgrove Complex, 798 King St.W., P.O. Bag 7800 Kingston, Ontario K7L 5T4 Tel.P: 613-531-5589 Fax: 613-293-7543 E-mail: aobrien@omafra.gov.ont.ca	Nutrition and Extension	1998
Dr. Paula Menzies	Dept. of Population Medicine OntarioVeterinary College University of Guelph Guelph, Ontario N1G 2W1 Tel.: 519-824-4120, Ext. 4043 Fax: 519-763-8621 E-mail: pmenzies@ovcnet.uoguelph.ca	Veterinary Extension	1998
Delma Kennedy	Agriculture & Rural, Fl. 3 NE O.M.A.F.R.A. 1 Stone Road West, Guelph, Ontario N1G 4Y2 Tel.: 519-826-3290 Fax: 519-826-3254 E-mail:dkennedy@omafra.gov.on.ca	Genetics	2001
George Mournahan	R.R. #2 Grand Valley, Ontario LON 1GO Tel.: 519-928-2176 Fax: 519-928-9977	Ontario Goat Breeders Association (Dairy)	2000
Mary Lou Clarke	R.R. #1 Dutton, Ontario N0L 1J0 Tel.: 519-762-3313 Fax: 519-762-0188	Ontario Goat Breeders Association (Dairy)	2000
Pat Marcotte	R.R. #1 Wahapitae, Ontario POM 3CO Tel. 705-694-5686	Ontario Goat Breeders Association (Dairy)	2000

| Table of Contents | | Top of Page |

| Education, Research & Laboratories Home Page |

| Central Site | Feedback | Search | Site Map | Français |
| Home | What's New | Calendar | Products | News Releases |

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